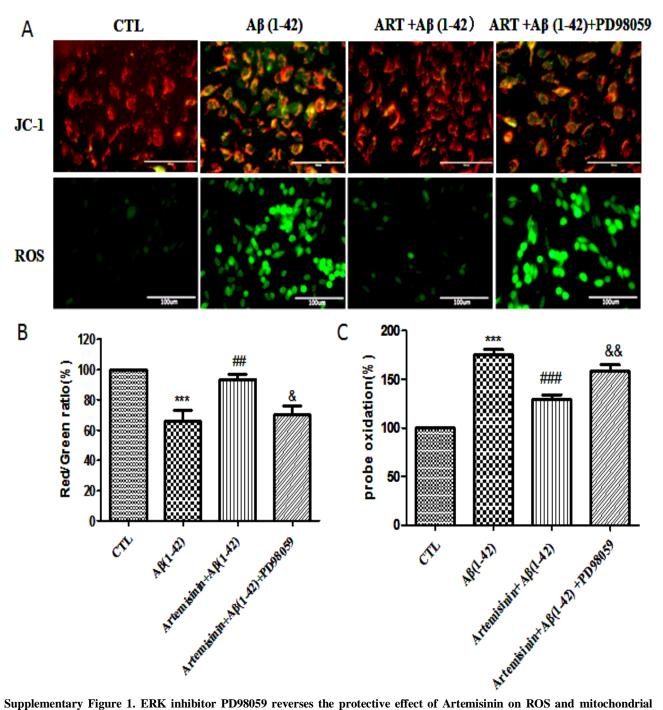
## SUPPLEMENTARY DATA

## Artemisinin Improved Neuronal Functions in Alzheimer's Disease Animal Model 3xtg Mice and Neuronal Cells via Stimulating the ERK/CREB Signaling Pathway

Xia Zhao, Shuai Li, Uma Gaur, Wenhua Zheng\*

Center of Reproduction, Development & Aging and Institute of Translation Medicine, Faculty of Health Sciences, University of Macau, Taipa, Macau, China

## SUPPLEMENTARY DATA



Supplementary Figure 1. ERK inhibitor PD98059 reverses the protective effect of Artemisinin on ROS and mitochondrial membrane potential ( $\Delta\psi m$ ) in SH-SY5Y cells. (A) Cells, pretreated with 25  $\mu$ M PD98059 (ERK inhibitor) for 60 min, were incubated with 4  $\mu$ M A $\beta_{1-42}$  in the presence or absence of 12.5 $\mu$ M ART. The mitochondrial membrane potential was reflected by the shift of fluorescence from red to green indicated by JC-1. The fluorescent images represent the intracellular ROS level as determined by the DCFH-DA Reagent. (B) Red to green fluorescence intensity ratio (increase of mitochondrial membrane potential). (C) Quantitation of the percentage of intracellular ROS level. \*: Difference between the A $\beta_{1-42}$  group and WT groups; #: Difference between the A $\beta_{1-42}$  and other groups; &: Difference between the ART+A $\beta_{1-42}$  and other groups; \*\*\*P<0.001, \*\*#P<0.001, \*\*#P<0.001, \*\*P<0.005, \*&\*P<0.01.